Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

F1_M3

C Number: C20302

Lock Date: 12/07/2005

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Date Report Reqsted: 11/17/2006

Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

Test Type: 90-DAY

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Regsted: 11/17/2006

Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

B6C3F1 MICE MALE	control	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
Disposition Summary						
Animals Initially in Study Early Deaths Survivors	10	10	10	10	10	10
Terminal Sacrifice Animals Examined Microscopically	10 10	10 10	10 10	10 10	10 10	10 10
ALIMENTARY SYSTEM						
Gallbladder Pancreas	(9) (10)	(0) (0)	(0) (0)	(0) (1)	(0) (0)	(7) (10)
CARDIOVASCULAR SYSTEM						
None						
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
None						
HEMATOPOIETIC SYSTEM						
None						

INTEGUMENTARY SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

Test Type: 90-DAY

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

ALPHA-PINENE

CAS Number: 80-56-8

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Date Report Reqsted: 11/17/2006

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Lab: BNW

B6C3F1 MICE MALE	control	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
None						
MUSCULOSKELETAL SYSTEM						
None						
NERVOUS SYSTEM						
None						
RESPIRATORY SYSTEM						
None						
SPECIAL SENSES SYSTEM						
None						
URINARY SYSTEM						
Kidney Urinary Bladder	(10) (10)	(10) (10)	(10) (10)	(10) (10)	(10) (10)	(10) (10)

Species/Strain: MICE/B6C3F1

Test Type: 90-DAY

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006

Time Report Reqsted: 07:28:41
First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

B6C3F1 MICE MALE	control	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm

Tumor Summary for Males

Route: RESPIRATORY EXPOSURE WHOLE BODY

Total Animals with Primary Neoplasms (b)

Total Primary Neoplasms

Total Animals with Benign Neoplasms

Total Benign Neoplasms

Total Animals with Malignant Neoplasms

Total Malignant Neoplasms

Total Animals with Metastatic Neoplasms

Total Metastatic Neoplasms

Total Animals with Malignant Neoplasms Uncertain Primary Site

Total Animals with Neoplasms Uncertain-Benign or Malignant Total Uncertain Neoplasms

*** END OF MALE ***

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

Test Type: 90-DAY

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006

Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

B6C3F1 MICE FEMALE	control	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
Disposition Summary						
Animals Initially in Study Early Deaths Survivors	10	10	10	10	10	10
Terminal Sacrifice Animals Examined Microscopically	10 10	10 10	10 10	10 10	10 10	10 10
ALIMENTARY SYSTEM						
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
CARDIOVASCULAR SYSTEM						
None						
ENDOCRINE SYSTEM						
None						
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Ovary Teratoma Benign	(10) 1 (10%)	(0)	(0)	(0)	(0)	(10)
HEMATOPOIETIC SYSTEM						
None						

INTEGUMENTARY SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

Test Type: 90-DAY

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006

Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

B6C3F1 MICE FEMALE	control	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
None						
MUSCULOSKELETAL SYSTEM						
None						
NERVOUS SYSTEM						
None						
RESPIRATORY SYSTEM						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
SPECIAL SENSES SYSTEM						
None						
URINARY SYSTEM						
Kidney Urinary Bladder	(10) (10)	(10) (10)	(10) (10)	(10) (10)	(10) (10)	(10) (10)

Species/Strain: MICE/B6C3F1

Test Type: 90-DAY

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Reqsted: 11/17/2006

Time Report Reqsted: 07:28:41 First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

B6C3F1 MICE FEMALE	control	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
			• •			

Tumor Summary for Females

Total Uncertain Neoplasms

Route: RESPIRATORY EXPOSURE WHOLE BODY

Total Animals with Primary Neoplasms (b) Total Primary Neoplasms	1 1
Total Animals with Benign Neoplasms Total Benign Neoplasms	1 1
Total Animals with Malignant Neoplasms Total Malignant Neoplasms	
Total Animals with Metastatic Neoplasms Total Metastatic Neoplasms	
Total Animals with Malignant Neoplasms Uncertain Primary Site	
Total Animals with Neoplasms Uncertain-Benign or Malignant	

*** END OF REPORT ***

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors